

## **Migration Toolkit for Applications 5.1**

## Web Console Guide

Use the Migration Toolkit for Applications web console to group your applications into projects for analysis.

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## Abstract

This guide describes how to use the Migration Toolkit for Applications web console to simplify migration or modernization of Java applications.

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## MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see our CTO Chris Wright's message.

## **CHAPTER 1. INTRODUCTION**

## **1.1. ABOUT THE WEB CONSOLE GUIDE**

This guide is for engineers, consultants, and others who want to use the Migration Toolkit for Applications (MTA) to migrate or modernize Java applications or other components. It describes how to install and use the web console to manage migration or modernization projects and analyze applications.

## **1.2. ABOUT THE MIGRATION TOOLKIT FOR APPLICATIONS**

#### What is the Migration Toolkit for Applications?

The Migration Toolkit for Applications (MTA) is an extensible and customizable rule-based tool that simplifies the migration and modernization of Java applications.

MTA examines application artifacts, including project source directories and application archives, and then produces an HTML report highlighting areas needing changes. MTA supports many migration paths including the following examples:

- Migrating from enterprise application servers to Red Hat JBoss Enterprise Application Platform
- Containerizing applications and making them cloud-ready
- Migrating from Spring Boot to Quarkus
- Updating OpenJDK versions

For more information about use cases and migration paths, see the MTA for developers web page.

#### How does the Migration Toolkit for Applications simplify migration?

The Migration Toolkit for Applications looks for common resources and known trouble spots when migrating applications. It provides a high-level view of the technologies used by the application.

MTA generates a detailed report evaluating a migration or modernization path. This report can help you to estimate the effort required for large-scale projects and to reduce the work involved.

#### How do I learn more?

See the *Introduction to the Migration Toolkit for Applications* to learn more about the features, supported configurations, system requirements, and available tools in the Migration Toolkit for Applications.

## **1.3. ABOUT THE WEB CONSOLE**

The web console for the Migration Toolkit for Applications allows a team of users to assess and prioritize migration and modernization efforts for a large number of applications. It allows you to group applications into projects for analysis and provides numerous reports that highlight the results.

## CHAPTER 2. INSTALLING THE WEB CONSOLE

You can install the web console on Linux, Windows, macOS, or Red Hat OpenShift Container Platform.

## 2.1. INSTALLING THE WEB CONSOLE ON LINUX, WINDOWS, OR MACOS

You can install the web console on Linux, Windows, or macOS operating systems and access the web console in a browser.

The web console has been tested with Chrome and Firefox.

#### Prerequisites

- OpenJDK 1.8, OpenJDK 11, Oracle JDK 1.8, or Oracle JDK 11
- 8 GB RAM
- If you are installing on macOS, the value of **maxproc** must be **2048** or greater.

#### Procedure

- 1. Navigate to the MTA Download page and download the web console **Local install & OpenShift** file.
- 2. Extract the **.zip** file to a directory of your choice.



#### NOTE

If you are installing on a Windows operating system:

- 1. Extract the .zip file to a folder named mta to avoid a Path too long error.
- 2. If a **Confirm file replace** window is displayed during extraction, click **Yes to** all.

The installation directory is referred to as **<MTA\_HOME>** in this guide.

- 3. Start the web console:
  - Linux operating system:

\$ <MTA\_HOME>/run\_mta.sh

• Windows operating system:



4. Open a browser and navigate to **http://localhost:8080/mta-web**. The web console login page is displayed in your browser.

Figure 2.1. Web console login page

<b>Migrat</b> Web Con:	cion Toolkit for Applications		
Username or email Password	Log In	Welcome to the Migration Toolki for Applications Web Console. Learn more about Migration Toolki for Applications from the documentation.	
			🦰 Red Hat

The default user is mta and the default password is password.

# 2.2. INSTALLING THE WEB CONSOLE ON OPENSHIFT CONTAINER PLATFORM

You can install the web console on OpenShift Container Platform 4.6 and later versions with the Migration Toolkit for Applications Operator.

You can install the web console on OpenShift Container Platform 4.2-4.5 by importing a template and instantiating it to create the web console application.

#### 2.2.1. Installing the web console on OpenShift Container Platform 4.6 and later

You can install the web console on OpenShift Container Platform 4.6 and later versions with the Migration Toolkit for Applications Operator.



#### NOTE

The Migration Toolkit for Applications Operator is a Community Operator. Red Hat provides no support for Community Operators.

#### Prerequisites

- 4 vCPUs, 8 GB RAM, and 40 GB persistent storage.
- One or more projects in which you can install the web console.



#### IMPORTANT

Do not install the web console in a default project.

- **cluster-admin** privileges to install the Migration Toolkit for Applications Operator.
- project-admin-user privileges to install the web console application in a project.

#### Installing the Migration Toolkit for Applications Operator

1. Log in to the OpenShift web console as a user with **cluster-admin** privileges.

- 2. Click **Operators** → **OperatorHub**.
- 3. Use the **Search by keyword** field to locate the **Migration Toolkit for Applications** Operator.
- 4. Click Install.
- 5. Select a project from the Installed Namespace list and click Install.
- 6. Click **Operators**  $\rightarrow$  **Installed Operators** to verify that the Operator is installed.

#### Installing the web console application

- 1. Log in to the OpenShift web console as a user with **project-admin-user** privileges.
- 2. Switch to the **Developer** perspective and click +Add.
- 3. In the Add view, click Operator Backed.
- 4. Click the Migration Toolkit for Applications Operator.
- 5. Click Create.
- 6. Review the application settings and click Create.
- 7. In the **Topology** view, click the **mta-web-console** application and then click the **Resources** tab.
- 8. Click the **secure-mta-web-console** route to open the web console in a new browser window.
- 9. Enter the user name mta and the password password and click Log in.

#### Figure 2.2. Web console login page

Migration Toolkit for Applications Web Console		
Username or email	Welcome to the Migration Toolkit for Applications Web Console.	
Password Log In	Learn more about Migraton Toolik for Applications from the documentation.	
		🦰 Red Hat

#### 2.2.2. Installing the web console on OpenShift Container Platform 4.2-4.5

You can install the web console on OpenShift Container Platform 4.2-4.5 by importing a template and instantiating it to create the web console application.

#### Prerequisites

- 4 vCPUs, 8 GB RAM, and 40 GB persistent storage.
- One or more projects in which you can install the web console.



#### IMPORTANT

Do not install the web console in a default project.

#### Procedure

- 1. Navigate to the MTA Download page and download the web console **Local install & OpenShift** file.
- 2. Extract the .zip file to a directory, for example, MTA\_HOME.
- 3. Launch the OpenShift web console.
- 4. Click the Import YAML button in the upper-right corner of the web console.
- 5. Select **mta** from the **Project** list.
- Copy the contents of the appropriate template from the MTA\_HOME/openshift/templates/ directory into the Import YAML field. Two templates are provided, one for shared storage and one without shared storage.
- 7. Click Create.
- 8. Switch to the **Developer** perspective and click +Add.
- 9. In the Add view, click From Catalog.
- 10. Click the Migration Toolkit for Applications template.
- 11. Click Instantiate Template.
- 12. Review the application settings and click **Create**.
- 13. In the **Topology** view, click the **mta-web-console** application and then click the **Resources** tab.
- 14. Click the **secure-mta-web-console** route to open the web console in a new browser window.
- 15. Enter the user name **mta** and the password **password** and click **Log in**.

#### Figure 2.3. Web console login page

	it for Applications		
Web Console			
Username or email		Welcome to the Migration Toolkit for Applications Web Console.	
Password		Learn more about Migration Toolkit for Applications from the documentation.	
	Log In		

#### 2.2.3. Troubleshooting a web console installation on OpenShift

This section describes how to troubleshoot a web console installation on OpenShift Container Platform.

#### 2.2.3.1. Downloading logs using the OpenShift console

You can download pod logs using the OpenShift console.

#### Procedure

- 1. Open the OpenShift console and navigate to **Applications**  $\rightarrow$  **Pods**.
- 2. Click the **mta-web-console** pod.
- 3. Click Logs.
- 4. Click **Download** to download and save a log.

#### 2.2.3.2. Downloading logs using the CLI

You can download pod logs using the CLI.

#### Procedure

1. Obtain the pod names:

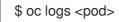


\$ oc get pods -n <project-name>

The output resembles the following:

NAME READY STATUS RESTARTS AGE eap-builder-1-build 0/1 Completed 0 1d mta-postgresgl-1-hfbdn 1/1 Running 1d 0 Completed 0 mta-sso-1-build 0/1 1d mta-web-console-1-build 0/1 Completed 0 1d mta-web-console-1-vt7s5 1/1 Running 1d 1 Running sso-1-wil2n 1/1 1 1d

2. Use **oc logs** to examine the pod log:





#### NOTE

You can redirect the output to obtain a copy of the current log:

\$ oc logs <pod> > ./<pod>.log

#### 2.2.3.3. No route to host error

The No route to host error in the mta-web-console-executor log indicates that the mta-web-consoleexecutor pod cannot connect to the mta-web-console pod:

13:44:03,501 SEVERE [org.jboss.windup.web.messaging.executor.ExecutorBootstrap] (main) Could

not start messaging listener due to: Failed to connect to any server. Servers tried: [httpremoting://192.0.2.4:8080 (java.net.NoRouteToHostException: No route to host)]: javax.naming.CommunicationException: Failed to connect to any server. Servers tried: [httpremoting://192.0.2.4:8080 (java.net.NoRouteToHostException: No route to host)]

This error occurs because the **mta-web-console-executor** pod starts running before the **mta-web-console** pod.

Check the **mta-web-console-executor** log after the **mta-web-console** pod has been running for a few minutes.

#### 2.2.3.4. Insufficient resources

The following conditions indicate insufficient resources:

• The **mta-web-console** pod is not running and the following error is displayed on the **Events** tab of the **Pod Details** screen in the OpenShift console:

0/9 nodes are available: 4 Insufficient cpu, 4 MatchNodeSelector, 9 Insufficient memory.

• The **mta-web-console-deploy**, **mta-web-console-executor-deploy**, and **mta-web-consolepostgresql-deploy** pods time out and the following error is displayed in the logs:

error: update acceptor rejected mta-web-console-executor-1: Pods for rc 'mta/mta-web-console-executor-1' took longer than 600 seconds to become available

To resolve these problems:

- 1. Install and run the cluster capacity tool to determine how many pods you can schedule.
- 2. Change the load on the cluster resources by performing one of the following actions:
  - Increase the limit ranges or the resource quotas of your project.
  - Reduce the requested resources of your project. The web console requires a minimum of 4 vCPUs and 8 GB RAM.
  - Run fewer jobs.
- 3. Redeploy the web console.

#### 2.2.3.5. Reporting issues

MTA uses Jira as its issue tracking system. If you encounter an issue executing MTA, submit a Jira issue.

## CHAPTER 3. USING THE WEB CONSOLE TO ANALYZE APPLICATIONS

You can create a project in the web console to analyze your applications.

Each project groups the applications for a specific analysis, which you can configure with custom rules and labels.

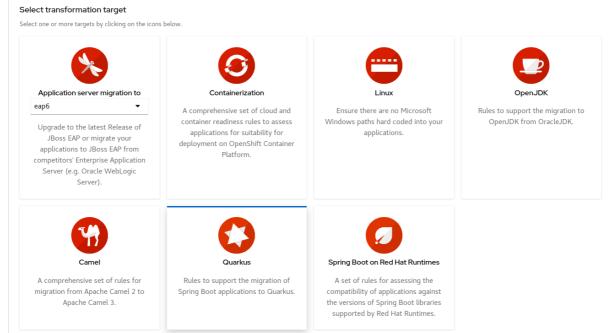
The analysis process generates reports that describe the readiness of your applications for migration or modernization.

## **3.1. CREATING A PROJECT**

You can create a project in the web console with the Create project wizard.

#### Procedure

- 1. In the web console, click **Projects**.
- 2. Click Create project.
- 3. Enter a unique name for the project, an optional description, and click Next.
- To upload applications, click the Upload tab, click Browse, select the application files you want to upload, and click Close.
   Uploading applications stores them directly on the MTA server.
- To register a server path, click the Server path tab and enter the Server-side path of the application in the field.
   Registering the server path of an application ensures that MTA always uses the latest version.
- 6. Click Next.
- 7. Click one or more transformation targets.



#### 8. Click Next.

- 9. Select packages and click > to include them in the analysis.
- 10. Click Next.
- If you want to add a custom rule, click Add rule.
   See the Rules Development Guide for more information.
  - To upload a ruleset file, click the **Upload** tab, click **Browse**, select one or more files, and click **Close**.

A ruleset file must have an **.mta.xml** or **.windup.xml** extension. The uploaded file is stored on the MTA server.

• To register the server path of a ruleset file, click the **Server path** tab, enter the **Rules** path, and click **Save**.

Registering the server path ensures that the MTA server always uses the latest version of the ruleset files.

12. Click Next.

- 13. If you want to add a custom label, click Add label.
  - To upload a labelset file, click the **Upload** tab, click **Browse**, select one or more files, and click **Close**.

A labelset file must have an **.mta.label.xml** or **.windup.label.xml** extension. The uploaded file is stored on the MTA server.

• To register a server path, click the **Server path** tab, enter the **Labels path** of the label files in the field, and click **Save**.

Registering the server path ensures that the MTA server always uses the latest version of the labelset files.

- 14. Click Next.
- 15. Review the following **Advanced options** and make any necessary changes:
  - Target
  - Source
  - **Exclude tags**: Rules with these tags are not processed.
  - Additional classpath: Enter a space-delimited list of additional .jar files or directories so that they are available for decompilation or other analysis.
  - Application name
  - Mavenize group ID
  - Ignore path: Enter a path for files to exclude from analysis.
  - **Export CSV**: Exports the report data as a CSV file.
  - **Disable Tattletale**: Disables generation of a Tattletale report for each application.
  - **Class Not Found analysis** Enables analysis of Java files that are not available on the class path. This option should not be used if some classes are unavailable for analysis.

- **Compatible Files report**: Generating a Compatible Files report might take a long time for large applications.
- **Exploded app**: The input directory contains the unpackaged source files of an application.
- Keep work dirs: Retains temporary files, for example, the graph database or extracted archive files, for debugging purposes.
- Skip reports: HTML reports are not generated. Must be enabled if you enabled Export CSV.
- Allow network access: This option reduces performance.
- **Mavenize**: Creates a Maven project directory structure based on the structure and content of the application.
- Source mode: Application files are raw source files, not compiled binaries.
- 16. Click Next.
- Review your project and click Save or Save and run The project is displayed in the Projects screen.

## **3.2. RUNNING A SAVED ANALYSIS**

You can run a saved analysis.

#### Procedure

- 1. In the web console, click Analysis results.
- 2. Select a project.
- 3. Click Run analysis.

A progress bar displays the progress of your analysis.

## **3.3. VIEWING ANALYSIS RESULTS**

The results of all analyses are grouped and listed by project on the Analysis results screen.

#### Procedure

1. In the web console, click Analysis results.

	Continue using previous UI		×
Migration Toolkit for App	lications - Web Console		🔊 mta 👻 🧕
Projects	Analysis #3 Completed		Actions 💌
Analysis results	Details Logs		
Applications			
Analysis configuration	Transformation path	Status	
	Target	Status	Started
Global	quarkus	Completed	Thu Nov 26 2020 16:03:21 GMT+0000
Rules configuration	Source	Duration	Reports
	Not defined	24 seconds	Lett Reports
Labels configuration	Applications <	Included packages	¢
	Custom rules		¢
	Custom labels		٢
🛁 Red Hat	Advanced options		¢

- 2. Select a project from the list.
- Click the number of the analysis you want to review.
   The results are displayed in the **Results** screen, which contains two tabs: **Details** and **Logs**.

The **Details** tab displays important details of the analysis, such as status, start date, duration, and configuration settings.

#### Figure 3.1. Analysis details screen

			×
Migration Toolkit for App	ications - Web Console		🕑 mta 🕶 🥘
Projects	Analysis #3 © Completed		Actions 💌
Analysis results	Details Logs		
Applications Analysis configuration	Transformation path	Status Status	Started
Global	quarkus	Completed	Thu Nov 26 2020 16:03:21 GMT+0000
Rules configuration	Source Not defined	Duration 24 seconds	Reports 네 Reports
Labels configuration	Applications <	Included packages	٢
	Custom rules		¢
	Custom labels		¢
ڂ Red Hat	Advanced options		¢

The **Logs** tab displays the logs generated during the analysis.

#### Figure 3.2. Analysis logs screen

Analysis #7 © completed	Actions
Details Logs	
og loaded	🛓 Downl
1544 lines	
<ul> <li>2020-12-01 14:37 [0/1542] Executing MTA</li> <li>2020-12-01 14:37 [1/1542] InitializationPhase - RegisterApiPackagesInTypeInterestFactoryRuleProvider - 2020-12-01 14:37 [3/1542] InitializationPhase - RegisterApiPackagesInTypeInterestFactoryRuleProvider - 1</li> <li>2020-12-01 14:37 [5/1542] InitializationPhase - ArchiveIdentificationConfigLoadingRuleProvider - ArchiveIdentificationOnfigLoadingRuleProvider - ArchiveIdentificationOnfigLoadingRuleProvider - 1</li> <li>2020-12-01 14:37 [5/1542] InitializationPhase - ArchiveIdentIficationConfigLoadingRuleProvider - ArchiveIdentIficationOnfigLoadingRuleProvider - ArchiveIdentIficationOnfigLoadingRuleProvider - ArchiveIdentIficationOnfigLoadingRuleProvider - 1</li> <li>2020-12-01 14:37 [5/1542] InitializationPhase - GatherIgnoredFileNamesRuleProvider - GatherIgnoredFileNamesRuleProvider - 1</li> <li>2020-12-01 14:37 [10/1542] InitializationPhase - DiscoverFileSAndTypesRuleProvider - 1</li> <li>2020-12-01 14:37 [10/1542] InitializationPhase - DiscoverFileSAndTypesRuleProvider - 2</li> <li>2020-12-01 14:37 [10/1542] InitializationPhase - DiscoverFileSAndTypesRuleProvider - 2</li> <li>2020-12-01 14:37 [11/1542] ArchiveExtractionPhase - UnzipArchiveSTOOutputRuleProvider - UnzipArchiveSTOOutputRuleProvider - 1</li> <li>2020-12-01 14:37 [11/1542] ArchiveExtractionPhase - DiscoverFileSAndTypesRuleProvider - 1</li> <li>2020-12-01 14:37 [13/1542] InitializationPhase - DiscoverFileSAndTypesRuleProvider - 1</li> <li>2020-12-01 14:37 [13/1542] ArchiveExtractionPhase - DiscoverFileSAnteProvide</li></ul>	

## **3.4. REVIEWING REPORTS**

The MTA web console provides a set of detailed reports that can help you decide if you need to make any changes to your applications. You access these reports from the **Analysis results** screen.

The reports are described in detail in MTA reports in the CLI Guide.

#### Procedure

- 1. In the web console, click Analysis results.
- 2. Click the **Reports** icon 🔛 beside the analysis you want to investigate. The **All applications** screen of the reports is displayed.

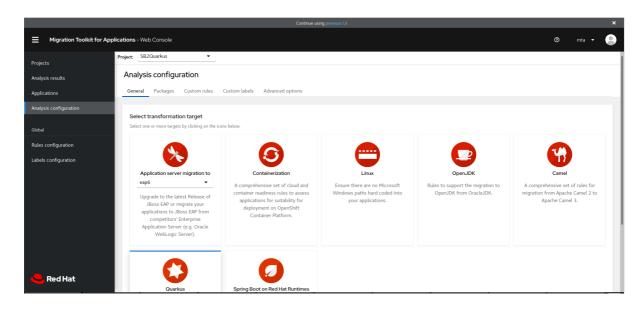
MIGRATION TOOLKIT FOR APPLICATIONS	<mark>e</mark> Red Hat
A Alaphallors 4 Technologies • Alaut	📮 Send Feedback
Application List •	
Name •     Filter by name     Matches all filters (AND) •     Name •     Ig	
Runtime labels legend Supported Partially supported Unsuitable Neutral	
Number of incidents	
apa-dbbrowser-war-1.0.war JBoss EAP JWS approx 2006 transport transport to the strange production of the strange productio	
Page generation: Nov 25, 2020 5 00 to PM Public secondary on Public providers execution overview [FreeMasker methods	

## **3.5. UPDATING AN ANALYSIS CONFIGURATION**

You can update an analysis configuration, for example, with a different transformation target, advanced option, or a custom rule. Then you can run the updated analysis in your project.

#### Procedure

1. In the web console, click Analysis configuration.



- 2. Select a Project.
- 3. Click the appropriate tabs and make your changes.
- Click Save or Save and run The project is displayed in the Projects screen.

## 3.6. ADDING GLOBAL CUSTOM RULES

MTA includes a preconfigured set of global rules, which apply to all projects.

You can define your own custom global rules.

For information on writing custom MTA rules, see the MTA Rules Development Guide.

#### Procedure

- 1. In the web console, click Rules configuration.
- 2. Click Add rules.
- 3. To upload a ruleset file, click the **Upload** tab, click **Browse**, select one or more files, and click **Close**.

A ruleset file must have an **.mta.xml** or **.windup.xml** extension. The uploaded file is stored on the MTA server.

To register the server path of a ruleset file, click the Server path tab, enter the Rules path, and click Save.
 Desistering the server path opeuros that the MTA server always uses the latest version of the

Registering the server path ensures that the MTA server always uses the latest version of the ruleset files.

The **Custom rules** list displays the rules.

## 3.7. ADDING GLOBAL CUSTOM LABELS

MTA includes a preconfigured set of global labels, which apply to all projects.

You can define your own custom global labels.

#### Procedure

- 1. In the web console, click Labels configuration.
- 2. Click Add label.
- 3. To upload a labelset file, click the **Upload** tab, click **Browse**, select one or more files, and click **Close**.

A labelset file must have an **.mta.label.xml** or **.windup.label.xml** extension. The uploaded file is stored on the MTA server.

4. To register the server path of a labelset file, click the **Server path** tab, enter the **Labels** path, and click **Save**.

Registering the server path ensures that the MTA server always uses the latest version of the labelset files.

The **Custom labels** list displays the labels.

## CHAPTER 4. CONFIGURING AUTHENTICATION FOR THE WEB CONSOLE

You can configure the web console to require authentication, which is handled by Red Hat Single Sign-On. When enabled, users will be required to authenticate before being granted access to the web console.

It is recommended to complete the following steps to configure authentication for the web console.

1. Enable authentication for the web console.



#### NOTE

If you have installed web console on OpenShift, authentication is already enabled and cannot be disabled.

- 2. Change the administrative user's credentials.
- 3. Remove the default web console user.
- 4. Add web console users.

## 4.1. ENABLING AUTHENTICATION FOR WEB CONSOLE



#### NOTE

If you have installed web console on OpenShift, authentication is already enabled and cannot be disabled.

Run the following script to require users to log in before accessing the web console. This script configures the Red Hat Single Sign-On login page to require users to authenticate before granting access to the web console.

\$ <MTA\_HOME>/switch\_to\_authentication\_required.sh



#### NOTE

In a Windows environment, use the **switch\_to\_authentication\_required.bat** script.

Now, whenever you start the web console, users will be required to authenticate to access it.

## 4.2. CHANGING THE ADMINISTRATIVE USER'S CREDENTIALS

When you enable authentication for the web console, a default administrative user is provided with the username **admin** and password **password**. You should change this password so that only those that are authorized can make further changes to web console users.

Follow these steps to change the default administrative user's password.

1. Make sure that the web console is running.

- 2. Open the Red Hat Single Sign-On administration console.
  - For a .zip installation:
    - a. Navigate to http://localhost:8080/auth/ in a browser.
    - b. Select **Administration Console** to access the Red Hat Single Sign-On administration console.
  - For an OpenShift installation:
    - a. Navigate to <**OPENSHIFT\_URL**>/console/project/mta/overview in a browser.



#### NOTE

If you renamed the OpenShift project when deploying, replace **mta** with the name of your project.

- b. Click the link in the SSO HTTPS application and add "/auth" to the end of the URL.
- c. Select **Administration Console** to access the Red Hat Single Sign-On administration console.
- 3. Log in with the default credentials of **admin** and **password**.
- 4. In the upper left corner, select the Master realm from the drop down.
- 5. In the left-side navigation menu, select **Users** and then click **View all users**.
- 6. From the **admin** user's row, click **Edit**.
- 7. Select the Credentials tab.
- 8. Enter the new password in the New Password and Password Confirmation fields.
- 9. Change the **Temporary** field to **OFF** to not require the user to change the password upon next login.
- 10. Click **Reset Password** and then click **Change password** in the popup.

You can also remove this default administrative user completely and create your own administrative users. However, be sure to add the new users before removing the default user.

## 4.3. REMOVING THE DEFAULT WEB CONSOLE USER

A default web console user is provided with the web console with the username **mta** and password **password**. When you enable authentication for the web console, you should remove this user so that the web console can only be accessed by authorized users.

Follow these steps to remove the default web console user.

- 1. Make sure that the web console is running.
- 2. Open the Red Hat Single Sign-On administration console.
  - For a .zip installation:

- a. Navigate to http://localhost:8080/auth/ in a browser.
- b. Select **Administration Console** to access the Red Hat Single Sign-On administration console.
- For an OpenShift installation:
  - a. Navigate to **<OPENSHIFT\_URL>/console/project/mta/overview** in a browser.



#### NOTE

If you renamed the OpenShift project when deploying, replace **mta** with the name of your project.

- b. Click the link in the SSO HTTPS application and add "/auth" to the end of the URL.
- c. Select **Administration Console** to access the Red Hat Single Sign-On administration console.
- 3. Log in with an administrative user's credentials. The default credentials are **admin** and **password**.
- 4. In the upper left corner, select the **mta** realm from the drop down.
- 5. From the left-side navigation menu, select Users and then click View all users.
- 6. From the **mta** user's row, click **Delete** and confirm.

## 4.4. ADDING A WEB CONSOLE USER

When authentication is enabled for the web console, administrators will need to add users so that they can access the web console.

Follow these steps to add a new web console user.

- 1. Make sure that the web console is running.
- 2. Open the Red Hat Single Sign-On administration console.
  - For a .zip installation:
    - a. Navigate to http://localhost:8080/auth/ in a browser.
    - b. Select **Administration Console** to access the Red Hat Single Sign-On administration console.
  - For an OpenShift installation:
    - a. Navigate to <**OPENSHIFT\_URL>/console/project/mta/overview** in a browser.



#### NOTE

If you renamed the OpenShift project when deploying, replace **mta** with the name of your project.

b. Click the link in the SSO HTTPS application and add "/auth" to the end of the URL.

- c. Select **Administration Console** to access the Red Hat Single Sign-On administration console.
- 3. Log in with an administrative user's credentials. The default credentials are **admin** and **password**.
- 4. In the upper left corner, select the **mta** realm from the drop down.
- 5. From the left-side navigation menu, select **Users** and then click **Add user**.
- 6. Enter the Username, First Name, Last Name, and any other required fields and click Save.
- 7. Once the user has been added, select the **Credentials** tab.
- 8. Enter a temporary password in the **New Password** and **Password Confirmation** fields, and leave the **Temporary** field set to **ON**.
- 9. Click Reset Password and then click Change password in the confirmation popup.

The user is enabled by default and will be required to set a new password when they log in to the web console with this temporary password.

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